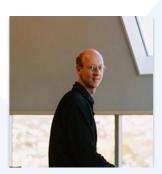


Gary Haverland, Director and Structural Engineer BE(Hons) MIPENZ CPEng

Christchurch tel: +64 3 968 4925 cell: +64 21 435 286 ghaverland@structex.co.nz



Gary joined Structex in 2006, as a Director and Principal Engineer of Structex Metro.

He has gained considerable experience over 24 years in the design of building structures and the technical aspects of design, as his career has progressed. Gary has become increasingly skilled in the management and coordination of the structural and civil design teams, and interaction necessary with both clients and other professionals.

Gary has worked on a wide range of projects; hospital redevelopments, leisure pools and shopping mall developments and other retail and commercial projects. A highlight has been the Christchurch Women's Hospital Redevelopment, which was Category A Award Winner for the 2005 New Zealand Engineering Excellence Awards.

## Sample Experience:

## Health

- Christchurch Women's Hospital Redevelopment [Category A Award Winner for 2005 New Zealand Engineering Excellence Awards] New 8-storey base isolated, women's hospital and day surgery unit.
- **41 St Asaph Street Additions & Refurbishment** \$1.06M additions and refurbishment to 2-storey for Canterbury District Health Board.
- **Burwood Hospital** \$13.5m ward and theatre extension for Canterbury District Health Board.
- Canterbury District Health Board Corporate Relocation Structural work associated with relocation of corporate office to Princess Margaret Hospital site.
- Christchurch Hospital Emergency Department Extensions
   This project involved the addition of 360 m<sup>2</sup> of floor space to the Christchurch Hospital Emergency
   Department. Structex designed prefabricated structural steel frames to allow construction and
   installation of small components within a "tight" construction zone.
- Christchurch Hospital Inward Goods Canopy Extension Structural and civil works associated with new canopy extension for Canterbury District Health Board.
- Diabetes & Dialysis Training Centre
   4-storey ductile frame and shear wall building utilizing efficient use of precast concrete.





- Hillmorton Hospital Redevelopment, Christchurch Refurbishment and extensions to existing hospital facility, generally single storey structures.
- Princess Margaret Hospital Redevelopment, Christchurch Extensive alterations, evaluation and strengthening of existing buildings, including infill buildings to existing courtyard.
- Southern Cross Hospital, Christchurch, Stage I and II \$7.2M 3-storey expansion to Southern Cross Hospital, including two new theatres and recovery ward.
- Southern Cross Hospital, Christchurch, Stage III \$4M new 3-storey building for surgical consultants includes 3-storey rapid construction precast concrete frame.
- Southern Cross Hospital, Christchurch, Endoscopy Consultants' Building The first PRESSS building designed and to be constructed in the South Island. This \$7M 4-storey, importance level 3 structure includes a part basement, and utilizes PRESSS technology to provide a more cost effective building that could be constructed in a shorter time frame than a conventional building.
- Southern Cross Hospital, Christchurch, PET Scanner \$2.5M new 3-storey building to house and service PET/CT scanner and associated plant.
- Sunnyside Hospital Redevelopment, Christchurch Refurbishment and extensions to existing single storey hospital facility.
- **Tuarangi Residential Home, Ashburton** \$3M alterations and extension to dementia unit in Ashburton.
- West Coast District Health Board, Seismic Assessment Seismic assessment of over 20 buildings at Buller Hospital and Grey Base Hospital. Buildings ranged from single dwelling home stay units to 3-4 storey reinforced concrete structures housing theatre facilities.

## **Pools**

- Caroline Bay Aquatic Centre, Timaru \$24M redevelopment of existing aquatic centre at Maori Park. The new facilities include new lap pool with diving platform, learn-to-swim pool, programme pool, 2 hydroslides, gymnasium and associated plant rooms.
- Hanmer Springs Thermal Reserve (2010)

\$5M expansion, including new lap pool, sensation pools, aquaplay area, rapid river, superbowl and associated plant rooms and stair tower.

Hanmer Springs Thermal Reserve

New outdoor leisure pool with hydroslide facilities, new changing room facilities and alteration to the existing administration area.

#### • Pioneer Pool & Leisure Centre, Christchurch

New indoor leisure pool and lap pool at Pioneer Stadium including new gym room and alterations to existing facilities.

QEII Swimming Pool & Leisure Centre Refurbishment, Christchurch

New \$18m indoor lap pool and extensive leisure pool complete with basement plant room constructed within an existing operational facility.





### Retail

- Mega Mitre 10, Ashburton 7500m<sup>2</sup> new retail store.
- Pak-n-Save Richmond, Nelson

New supermarket adjacent to existing shopping mall including internal mezzanine floor for plant room and offices.

- Retravision, Ashburton
   Extension to existing retail facility including mezzanine floor.
- **Riccarton Mall Redevelopment, Christchurch** Extensive \$35m redevelopment of existing shopping mall including new retail space and car parking buildings.

#### Rolleston New World

New supermarket and associated retail shops, including long span trusses and mezzanine to create column free environment.

- St Martins New World New supermarket constructed adjacent to existing trading supermarket.
- South City Shopping Centre, Christchurch New extensive shopping mall and major retail stores including mezzanine offices and plant rooms.
- The Palms at Shirley Shopping Centre, Christchurch Extensive redevelopment of existing shopping centre including new supermarket, food court, mall area and retail space.

## Commercial

- **295 Blenheim Road, Christchurch** Extensive staged development of show room, warehouse and office space, including 4 separate buildings divided into 7 separate tenancies. Extensive use of on-site precast concrete components.
- Antarctic Centre Expansion, Christchurch

New 4D experience extension to existing Antarctic Centre consisting of exposed aggregate precast panels and lightweight steel roof.

#### Chateau Marlborough Hotel, Blenheim

A major renovation and extension to an operating hotel including new hotel rooms, conference rooms and restaurant facilities. This project won the 2009 Marlborough Master Builders Association Awards for 2009, in the Tourism & Leisure Project category, and subsequently won the Commercial Project of the Year Award.

#### • Club Tower, Christchurch

The Club Tower is the South Island's first A-grade office accommodation tower with a 5-star green building rating. It comprises a 9-storey steel frame tower over a 3-storey pre-cast concrete podium with full basement parking. The basement excavation extended to the boundaries and neighbouring buildings.

#### • Correction Services, CPPS Buildings Christchurch

Structural and site works design for 2 single storey steel frame Parole Service buildings for the Department of Corrections. One building was constructed on a contaminated site requiring special disposal of contaminated soils and preventative measures to be put in place during construction to control possible migration of contaminated hydrocarbon liquids and odours.

#### • Engineering Paint Shop

New paint shop facilities constructed using tilt panels and steel portal frames.





- Gas Services Warehouse, Rolleston New industrial warehouse and associated offices constructed using tilt slab walls and steel portal frames.
- High Street Business Park, Greymouth
   \$3.5M expansive business park development, single storey construction with mezzanine floors incorporates feature precast blade columns and wall element.

# Residential

- Bainswood Rest Home, Rangiora
   Single storey extension to existing retirement village including structural and site works design.
- Caledonian Road Development
   An extensive townhouse development, comprising four 2 and 3-storey buildings, utilising extensive use of on site precast concrete and staged to meet sales demand.
- Elmswood Court Retirement Village, Christchurch Single storey expansive retirement village extension to existing retirement complex.
- **Tuarangi Residential Home, Ashburton** \$3M alterations and extension to dementia unit in Ashburton.
- Warwick Street Apartments, Christchurch 30 unit apartment complex with basement and three suspended levels.

# Education

- Aranui High School, Christchurch
   New single storey science block, technology block and three classroom blocks. Precast walls
   extensively used in the technology block appropriate for the building function
- **Greymouth High School Gymnasium, Greymouth** Concept and feasibility design for new gymnasium and change room facility.
- Lincoln High Gymnasium, Lincoln
   New gymnasium and associated classrooms and change rooms constructed utilising steel frame and
   thermomass concrete.
- Rangiora High School Strengthening, Rangiora Seismic assessment of three existing buildings and inspection of a further 27 buildings and report on strengthening requirements to Ministry of Education. Seismic upgrade to three main classroom blocks.
- Shirley Boys High School Christchurch New 2-storey administration block constructed adjacent to existing buildings.
- Te Poutini Polytechnic, Greymouth
   Additions to existing workshop facility constructed with self supporting precast concrete panels and
   steel portal frames.

## Other

Waipara Wine Village

A 2-storey 192 room hotel and spa development, offering conference facilities, restaurant, wine bar, ale house and luxury day spa. The construction utilises efficient and cost effective use of precast concrete wall and floor construction.





### • St John of God, Belfry, Christchurch Seismic assessment and strengthening of existing historic chapel.

- St Pauls Cathedral, Wellington Substantial extension to existing cathedral with 18m high ceiling space.
- Majestic House, Christchurch
   Assessment of existing theatre building, fly tower auditorium and adjacent office building, including seismic
   assessment and strengthening to meet building regulations.
- Majestic House, Christchurch Design of new 48 line flying system, including galleries, cross-overs, walk on grid and counterweight support.

### • Punakaiki Visitors Centre

Building condition report and structural assessment of three existing buildings to allow concept design of new visitors centre.



